CLAIMS

What is claimed is:

1.   A system for accessing remote devices on a communications network using out-of-band access, comprising:

a first server operable to,

(1) receive a request to communicate with one or more of said modems;

(2) authenticate a user;

(3) facilitate a session with a second server for establishing connection with an external network component;

(4) establish secure pathway over a communications network; and

(5) transmit data for monitoring system functions; and

a plurality of modems coupled to said first and second servers and operable to authenticate a request to access network elements and to communicate operational status of a plurality of network elements.

2.   The communications system of claim 1, wherein said second server is further operable to select a specific modem.

3.   The communications system of claim 1, wherein said first server is further operable to log invalid modem-login attempts.

4.   The communications system of claim 1, wherein said first server is further operable to allow specific access to privileged users for accessing network elements.

5.   The communications system of claim 1, wherein said second server is further operable to communicate with a centralized modem bank.

6.   A method for securely retrieving a status of one or more remote devices, including a modem, the method comprising:

requesting out-of-band access to a network element;

communicating with a remote modem coupled to said network element; and

authenticating a request to access said remote modem; and

7.   The method of claim 6, wherein requesting access to a network element includes requesting access to said network element via a modem.

8.   The method of claim 7, wherein authenticating a request includes validating a number dialed to determine if a request from said number is authorized to connect with said remote modem.

9.   The method of claim 8, wherein authenticating a request further includes processing security credentials to obtain access to said network element.

10.   The method of claim 7, wherein authenticating a request further includes one or more selections from the following:

providing a trusted communications pathway between a source element and a destination element using selective call acceptance (SCA);

encrypting communicated data to secure network communications;

authenticating said source and destination elements; and

utilizing automatic number identification (ANI) to authenticate a calling request.

11.   One or more computer-readable media having computer-useable instructions embodied thereon for performing a method of accessing devices on a communications network, the method comprising:

receiving a first request via an out-of-band process to establish a communications pathway with a network device;

receiving a security identifier to authenticate said first request;

identifying a dial-up number for accessing a remote modem;

capturing information associated with said first request to a log file;

directing a server to identify one of a plurality of modems that can provide feedback related to said network device;

authenticating a second request, said second request being a request to access said remote modem; and

authenticating a third request, said third request being a request to access said network element.

12.   The media of claim 11, wherein receiving a first request further comprises establishing a communications pathway by exchanging packets of information using one or more network protocols.

13.   The media of claim 12, wherein receiving a first request further comprises issuing a command to the network device to authenticate access to the network device.

14.   The media of claim 11, wherein receiving a security identifier includes receiving one or more security-credential components.

15.   The media of claim 11, wherein requesting a dial-up number includes:

issuing a request from a user;

receiving a telephone number for dialing; and

validating said telephone number against a predetermined dialing list.

16.   The media of claim 11, wherein capturing information includes capturing session information.

17.   The media of claim 16, wherein said session information includes data related to one or more of the following events:

failed attempts to access a network resource;

successful attempts to access one or more elements designated as sensitive or critical components;

logon successes and failures;

account creation or deletion;

account maintenance activity;

dial-up activity;

periods of system non-availability; and

security-administration activities.

18.   The media of claim 16, wherein information captured includes one or more of the following:

a user identifier;

a time stamp;

a date stamp;

a logon attempt;

a logoff attempt;

a network address;

a client identifier;

a user's location;

a dialed access number; and

a reason for logging an event.

19.   The media of claim 11, wherein directing a server to select a modem includes:

sending a request to establish a communications link with a remote modem;

selecting a modem from a modem pool;

receiving a response from said server to establish a link with said pooled modem; and

dialing a telephone number to said pooled modem to establishing a link with said remote modem.

20.   The media of claim 11, wherein authenticating a second request to access said remote modem includes:

receiving login identification for accessing said remote modem;

verifying said login identification against a list of authorized users; and

notifying said user with a status response.

21.   The media of claim 20, wherein said log-in identification is a username and password.

22.   The media of claim 20, wherein said status response is an approval or denial to access said remote modem.

23.   A system for retrieving status information from a remote device on a communications network, the system comprising:

a server programmed to receive one or more requests from a user to access said remote device and to authenticate that said one or more requests are submitted by an authorized user; and

a modem bank communicatively coupled to said server and to a remote modem,

wherein said remote modem is configured to accept communications only from a predetermined set of addresses or phone numbers, and

wherein said remote modem is coupled to said remote device.

24.   The system of claim 23, wherein said remote device cannot be accessed without authenticating said user.